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(60) **References to other related national documents:**

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(54) COSMETIC AND/OR DERMATOLOGICAL PREPARATION FOR TOPICAL USE FOR THE TREATMENT OF OILY SKINS

(57) The invention relates to a cosmetic and/or dermatological composition for the treatment of oily skins, characterized by the fact that it includes in combination a complex composed of one or several active agents presenting anti-seborrheic properties, a complex constituted of one or several active agents treating hyperkeratinization and an anti-inflammatory complex constituted of one or several restructuring and/or soothing active agents.

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[Bar Code]

The present invention relates to a cosmetic and/or dermatological composition intended for topical application for the treatment of oily skins and the dermatoses that are associated with them, particularly acne.

An oily skin presents sebaceous hypersecretion. The latter is due to a hypersensitivity of the sebaceous glands to androgens and/or to a hyper-activity of 5-alpha-reductase, the enzyme responsible for the conversion of testosterone to dihydrotestosterone, a powerful stimulant of sebaceous secretion.

The epidermis of oily skins is often thick because of poor natural desquamation. In addition, it presents hyperkeratinization at the level of the follicular canal, which brings about the obstruction of the follicle by a horny plug and thus the formation of microcysts and comedones. The latter then degenerate into pimples. This hyperkeratosis of the epidermis is linked to the irritant action of the fatty acids contained in the sebum, liberated during the degradation of triglycerides by the bacteria and yeasts present on the surface of the skin (Propionobacterium acnes and Pityrosporum ovale).

The bacterial proliferation, the source of irritating free fatty acids, associated with the rupture of the microcysts and comedones in the dermis, brings about inflammation.

Hyperseborrhea brings about hyperkeratinization and inflammation, which themselves activate seborrheic secretion. These skin disorders characteristic of oily skins are directly linked and intertwined.

Many cosmetic and/or dermatological compositions are found on the market that are intended to treat seborrheic dermatoses. To do this, they contain active agents which regulate the sebaceous flow and thus suppress the primary cause of the skin disorders of oily skins.

There thus remains a need for topical active agents that have an effect at the same time on sebaceous hypersecretion, hyperkeratinization and inflammation in order to obtain an efficacious treatment of oily skins.

Following significant research carried out in the field of treatment of oily skins, the applicant has perfected a composition which permits the treatment of the hyperseborrhea, hyperkeratinization, and inflammation characteristic of seborrheic dermatoses.

The subject of the present invention is thus a cosmetic and/or dermatological composition for the treatment of oily skins, characterized by the fact that it includes in combination a complex composed of one or several active agents presenting anti-seborrheic properties, a complex constituted of one or several active agents treating hyperkeratinization and an anti-inflammatory complex constituted of one or several restructuring and/or soothing active agents.

The anti-seborrheic complex according to the invention is composed of zinc salts, vitamin B5 (d-panthenol) and vitamin B6 (pyridoxine).

The zinc salts used in the composition according to the invention are advantageously supplied in the form of zinc gluconate. The latter, by virtue of its 5-alpha-reductase-inhibiting power, affects the regulation of the sebaceous flow. The B5 and B6 vitamins used in combination with zinc gluconate complete and potentialize its sebo-modulating activity.

The complex treating hyperkeratinization according to the invention includes a retinol ester and an alpha-hydroxyacid. According to a particularly preferred invention composition, the retinol ester is vitamin A palmitate and the alpha-hydroxyacid is citric acid.

Citric acid has a keratolytic effect: it frees the epidermis of its impurities and the excess sebum. Vitamin A palmitate has a kerato-modulating effect: it acts more deeply and stimulates the proliferation of the cells of the epidermis. Citric acid and vitamin A thus lead to a decrease in the thickness of the corneal layer and to a softening of the epidermis.

The anti-inflammatory complex according to the invention is composed of the combination of one or more anti-free radical agents and one or more monosaccharides. The anti free radical agents can be superoxide dismutase (SOD), Vitamin C derivatives or vitamin E derivatives. The monosaccharides are preferably chosen from among fucose and rhamnose. According to a particularly preferred composition of the invention, SOD is used in combination with ascorbyl palmitate as the vitamin C derivative and with tocopherol acetate as the vitamin E derivative. With these restructuring anti-free radical agents is associated a mixture of fucose and rhamnose which has a soothing effect.

The anti-inflammatory complex according to the invention can also contain an antiseptic agent. According to a particularly preferred composition of the invention, potassium sorbate, a particularly well tolerated antiseptic, is used.

The most appropriate proportions of each of the constituents of the composition according to the invention are the following, these proportions being expressed in percentage by weight relative to the total weight of the composition:

- zinc gluconate: 0.1 to 1%
- Vitamin B5 (d-panthenol): 0.1 to 1%
- Vitamin B6 (pyridoxine): 0.01 to 0.1%
- citric acid: 0.1 to 0.5%
- Vitamin A palmitate: 0.01 to 1%
- SOD: 0.01 to 1%
- ascorbyl palmitate: 0.01 to 1%
- tocopherol acetate: 0.1 to 5%
- fucose: 0.01 to 4%
- rhamnose: 0.1 to 5%
- potassium sorbate: 0.1 to 0.6%

The composition according to the invention can be presented in all the pharmaceutical forms usually used in cosmetic or dermatological compositions.

The compositions according to the invention can contain in addition all the constituents commonly used in cosmetic and/or dermatological compositions.

The compositions according to the invention can contain in addition active agents other than those previously cited and commonly used in cosmetic and/or dermatological compositions.

Specific examples which are in no way limiting will now be given to illustrate the invention.

Example 1:

Caprylic/capric/succinic triglyceride	1 to 10%
Ascorbyl palmitate	0.01 to 0.1%
Glyceryl stearate	1 to 5%
Stearic acid	1 to 5%
Tocopherol acetate	0.1 to 1%
Caprylic/capric triglyceride	1 to 15%
Pyridoxine	0.01 to 0.05%
Citric acid	0.1 to 0.5%
Zinc gluconate	0.1 to 1%
Trisodium citrate	1 to 2.5%
L-Arginine	0.1 to 2%
Glycerol	1 to 4%
Vitamin A palmitate	0.01 to 1%
d-Panthenol	0.1 to 1%
Rhamnose	0.1 to 1%
L-fucose	0.01 to 1%
Lactoferrin/lactoperoxidase	0.01 to 1%
Superoxide dismutase	0.01 to 1%
Polyacrylamide/C_{13-14} isoparaffin/Laureth-7	0.2 to 1%
Water	qsp 100%

Example 2:

Acrylic acid polymer	0.1 to 1.5%
Glycyrrhetinic acid	0.1 to 1%
Triethanolamine	0.1 to 2%
Butylene glycol	0.5 to 4%
Ascorbyl palmitate	0.01 to 0.1%
Tocopherol acetate	0.1 to 1%
Pyridoxine	0.01 to 0.05%
Citric acid	0.1 to 0.5%
Zinc gluconate	0.1 to 1%
Trisodium citrate	1 to 2.5%
L-Arginine	0.1 to 2%
Vitamin A palmitate	0.01 to 1%
d-Panthenol	0.1 to 1%
L-Fucose	0.01 to 1%
Lactoferrin/lactoperoxidase	0.01 to 1%
Superoxide dismutase	0.01 to 1%
Potassium sorbate	0.1 to 0.6%
Preservatives	qs
Water	qsp 100%

Example 3:

Propylene glycol	1 to 8%
Sorbitan monolaurate	0.5 to 5%
Dimethicone copolyol	0.1 to 5%
Salicylic acid	0.1 to 0.5%
Disodium EDTA	0.05 to 0.5%
Zinc gluconate	0.1 to 1%
Ascorbyl palmitate	0.01 to 0.1%
Tocopherol acetate	0.1 to 1%
Pyridoxine	0.01 to 0.05%
Citric acid	0.1 to 0.5%
Sodium chloride	0.1 to 1.5%
Trisodium citrate	1 to 2.5%
L-Arginine	0.1 to 2%
Vitamin A palmitate	0.01 to 1%
d-Panthenol	0.1 to 1%
Rhamnose	0.1 to 1%
L-Fucose	0.01 to 1%
Lactoferrin/lactoperoxidase	0.01 to 1%
Superoxide dismutase	0.01 to 1%
Preservatives	qs
Water	qsp 100%

CLAIMS

1. Cosmetic and/or dermatological composition for the treatment of oily skins, characterized by the fact that it includes in combination a complex composed of one or several active agents presenting anti-seborrheic properties, a complex constituted of one or several active agents treating hyperkeratinization and an anti-inflammatory complex constituted of one or several restructuring and/or soothing active agents.

2. Composition in accordance with claim 1, characterized by the fact that the anti-seborrheic complex is composed of zinc salts, vitamin B5 and vitamin B6.

3. Composition in accordance with claim 2, characterized by the fact that the zinc salts are supplied in the form of zinc gluconate.

4. Composition in accordance with any one of the claims 1 to 3, characterized by the fact that the complex treating hyperkeratinization includes a retinol ester and an alpha hydroxyacid.

5. Composition in accordance with claim 4, characterized by the fact that the retinol ester is vitamin A palmitate.

6. Composition in accordance with claim 4 or 5, characterized by the fact that the alpha hydroxyacid is citric acid.

7. Composition in accordance with any one of the claims 1 to 6, characterized by the fact that the anti-inflammatory complex is composed of one or several anti-free radical agents and of one or more monosaccharides.

8. Composition in accordance with claim 7, characterized by the fact that the anti-inflammatory complex is constituted of SOD, ascorbyl palmitate, tocopherol acetate, fucose and rhamnose.

9. Composition in accordance with one of the claims 1 to 8, characterized by the fact that the anti-inflammatory complex contains an antiseptic agent, preferably potassium sorbate.

10. Composition in accordance with any one of the claims 1 to 6, characterized by the fact that it includes the compounds in the following proportions, these proportions being expressed in percentage by weight relative to the total weight of the composition:

- zinc gluconate: 0.1 to 1%
- Vitamin B5 (d-panthenol): 0.1 to 1%
- vitamin B6 (pyridoxine): 0.01 to 0.1%
- citric acid: 0.1 to 0.5%
- Vitamin A palmitate: 0.01 to 1%
- SOD: 0.01 to 1%
- ascorbyl palmitate: 0.01 to 1%
- tocopherol acetate: 0.1 to 5%
- fucose: 0.01 to 4%
- rhamnose: 0.1 to 5%
- potassium sorbate: 0.1 to 0.6%

FRENCH REPUBLIC

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PRELIMINARY SEARCH REPORT
established based on the last claims filed before the start of the search

National Reg. No.
FA 549075
FR 9711967

DOCUMENTS CONSIDERED PERTINENT		
Category	Ref. of document with indication, if necessary, of pertinent parts	Relevant claims of the application examined
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A	EP 0 250 300 A (BFB studies and Experimental Research) Dec. 23, 1987 * claim 1 *	1,2
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TECHNICAL AREAS SEARCHED (Int Cl 6)

A61K

Date of completion of search
June 11, 1998

Examiner
Beyss, E.

Category of documents cited

A: pertinent in opposition to at least one claim or general technical background